

A Study of Smart Business System

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ABSTRACT

The new business may bring the improved methods of working and comfortable life in the society. One can earn more resources through improved and new techniques of business. Business is a system and it has large number of failures. The modeling of the business system in new creativity through which one can promote the enterprises. Advertisement and creation of utility of the enterprises may improve the system well. The reliability of the new creativity and innovity may be obtained using the law of diminishing return to the enterprises. The law of diminishing return may be derived using the both tub curve of the failure rate using the rate mechanism on the ground of bath tub curve of the system. The failure of the enterprises may be visualized. The laws of return are well known as law of constant return, the law increasing return and the resultant would be the law of diminishing return. The new enterprises using information Technology, Computer Science and Technology and Electronic and Communication enterprises are summarized. The natural logic

and fuzzy logic involved in the society as enterprises are also brought to their failure rates and reliability. the acceptance of the society is one of the major parameter in the market and enterprises, one can think of CBIS, MIS, DSS, DBS, OA, AI and data base system.

Keywords: business system, Creativity, Innovation.

INTRODUCTION

Creativity and innvoation are made in the society as a natural force. The charge occurs naturally due to dynamics of the society. The wills, wishes and demand of the society and the consumer make creativity and innovation of the enterprises. One can find the elasticity of the creativity and the innovity using. The law of utility, law of demand and supply and law of diminishig the utility of a thing due to fashion, customs and religious. Elasticity of supply and demand will govern the elasticity of the conformability make the creativity and innovity into the forces.

CRATIVITY

The new methods of working in a system may be creativity such as private engineering colleges management organization and administration. The failure rate of the government created a new space for the society to open new engineering colleges for better work, administration, organization and management. It is natural that failure of one system will enforce other systems to develop and grow in a useful manner. Creativity may be defined as follows:

$$\text{Creativity } C = \frac{\text{Creation of activity}}{\text{Maximum creation}}$$

It varies between 0 to 1.

INNOVITY

Innovation is the development of the systems according to the time dynamics and the dynamics of demands of the society. The colleges laboratories are equipped according to the computer demands. The teaching and courses are innovated according to the time one must move with the time.

CREAVITY AND INNOVITY OF PRIVATE ENGINEERING INSTITUTIONS AND SWASHASI ENINERENG COLLGES

The law of diminishing return mode the Government colleges to the low reliable systems. The organization, management and administration have greater failure rate with time due to well known factors of creativity and innovity. The law of diminishing return is the most natural to generate a failure rate. Any system has a life cycle and MTBF through which the end is the natural occurrence of system.

The maintenance, repair and availability concepts are applied to all the failing systems time to time. The Private engineering colleges have grown well on the basis of improved equipments and management. These colleges have greater creativity and innovity due to the elasticity of will, wishes and demand of the private owners and organizers. The management and administration can be analyzed on the ground of students' successes.

INNOVATION IN ADMINISTRATION

The administration concepts may be changed according to the society demand and acceptance. There was a vast difference between the administration of Gandhiji and English Administrators. "Work is Worship" formula is accepted by the society since a long time. Those who work will get a progress those who do not work will not find a place in the management. Rate of change of management is the administration. The rate of change of the administration is a product or a supply. Administration refers to the Government organization, which is not accepted by the society. The nature and modes of the Government are to dynamic and the Government is made by the society. One can form a differential equation of organization as follows:

$$a \frac{\partial^2 x}{\partial t^2} + b \frac{\partial x}{\partial t} + cx = \text{Force} \quad (1)$$

Where x is the organization is $\frac{\partial x}{\partial t}$

the management and $\frac{\partial^2 x}{\partial t^2}$ is the administration a, b, c are constant or weights on the administration, management and organization of system.

If organization is defined properly one can manage it well. If the managements are defined properly the administration may be simple. The organization refers to the synchronization of all the organs of the workers. The main goal of all the workers must be to increase the product and success of the system and the organization.

INNOVATION IN CBIS AND MIS

The computer based information systems [CBIS] and Management information system [MIS] are found to be successful in the management to save time and motion as well as money of the organization. The office automation [OA] may bring great innovation and creativity in the management systems. The CBIS have many components such as DSS, AL, OA, DBS, and MIS, which also face the law of diminishing return and fast failure rates and expected in the future.

RELIABILITY OF INFORMATION TECHNOLOGY

Information Technology has made the life of society comfortable and entire world is made one family. The progress of the World Wide Web is essential like the highways and streets or roads to connect the large cities with small cities and villages. The life of human is raised to one thousand years for equivalent work done in a specified period. The CBIS, MIS, DSS, AL, OA and DBS are the part of the IT.

The information technology will not face the law of diminishing return as it is based on the law of re-occurring of wills and multiplication of demands and wishes for comforts and facilities.

CREATUVUTT AND INNOVITY IS THE NAME OF CBIS AND MIS FOR ORGANISATION AND MANagements

The CBIS and MIS brought high comfort for the colleges and industries and other productive organizations students may be given lectures using computers in place of black boards only very good teachers should do the job of teachers. Teachers job is extremely hard and every body cannot be come a teacher. Teachers should teach without seeing the books and referring notes. They should understand the lecture and then deliver to the students. If the teacher understands the lecture well, the students

will certainly follow if fully.

FUZZY LOGIC APPLIED CREATIVITY AND INNOVITY FOR ENTERPRISES

Creation and innovation are fuzzy statements and fuzzy variables for organization. Most of our ideas and thinking are fuzzy and they should be Fuzzified and then defuzzified to find the result and grade of truth of the result. The new creative methods MIS, CBIS, DSS, DBS, OA, AI have failure rates and can be found using the law of the diminishing return of the systems, or the Bathtub Curve for the failure rate.

Table- 1
Creativity : Entrepreneurial Development

SNo	Fuzzy Variable	μ_c	λ	R	Sa	e-t	A	a	MTBF
01	Creativity is the new	.886	.1203	.1072	.892	.886	.827	.189	9.26
02	New concepts introduced	.776	.2536	.1968	.803	.776	.832	.184	3.9432
03	change in the society demands	.668	.403	.2692	.7308	.668	.778	.251	2.481
04	Change in the studies	.826	.1911	.1978	.842	.826	.812	.2082	5.2328
05	Fast change in computers	.926	.0768	.0711	.928	.926	.792	.233	13.02
06	Better tools and instruments	.727	.3188	.2317	.7682	.727	.772	.258	3.136
07	Change in the management	.896	.1098	.0983	.9016	.896	.826	.1911	9.107
08	Formation of a new organization	.786	.2408	.1892	.8107	.786	.866	.1210	4.152
09	New teaching methods	.962	.0387	.0372	.9627	.962	.792	.233	25.839
10	Change in fashion, customs and religions	.662	.412	.2727	.7272	.662	.776	.2536	2.427
11	Creation of utility of a thing	.889	.1176	.1045	.895	.889	.892	.1142	3.503
12	Rooting out old resistive methods	.627	.4668	.2926	.7073	.627	.668	.12103	2.142
13	Making concepts of society new	.832	.1839	.1530	.847	.832	.769	.2786	5.437
14	Comfortable life by virtue of nature	.666	.4064	.2706	.7293	.660	.782	.2458	2.460

Fuzzy grades of truth are obtained for each Fuzzy variable and designated. The failure rate may be found appropriately for the system using law of diminishing return. The risk R, reliability R, security, Availability A and MTBF may be found. The Fuzzy cardinality of the fourteen elements is found to obtain Fuzzy

membership function. The Fuzzy cardinality of Fuzzy set C is 11.905 and relative Fuzzy cordiality 0.85 one can represent it as follow:

$$\|AC\| = 0.85 \quad (2)$$

Table - 3 represents innovity indices of enterprises in the form of some events,

calling then, Fuzzy membership function availability A, and MTBF in years. and their failure rate Risk [R] and security

Table - 2
Innvoity : Entrepreneurial Development

Sno.	Fuzzy variable	I	λ	e - t	λ [R]	R	Sec.	AMTBF
01	Innovation due to like new Technology like MIS	.927	.0758	.927	.0702	.9297	.916	13.1926
02	Information technology [IT]	.896	.1098	.896	.0983	.9019	.866	9.1074
03	CBIS in forces	.962	.0387	.962	.0372	.962	.778	25.84
04	Office Automation [OA]	.926	.0768	.926	.0712	.928	.826	13.020
05	Artificial intelligence [AI]	.886	.1210	.886	.1072	.892	.876	8.264
06	Modification of management	.926	.0768	.925	.0712	.928	.927	13.02
07	Laboratories development	.776	.2537	.776	.1966	.8033	.826	3.916
08	Fuzzy logic systems [simple]	.892	.1142	.892	.1019	.898	.886	8.756
09	Neural systems for fast working [large system]	.927	.0758	.927	.0702	.9297	.912	13.192
10	Data base systems [simple]	.823	.1947	.823	.1603	.8397	.862	5.136
11	CAD and CAM systems	.927	.0758	.927	.0702	.9297	.912	13.192
12	Nuclear power systems	.662	.412	.663	.2730	.727	.732	2.427
13	Private telecommunication	.779	.249	.778	.1945	.805	.812	4.016
14	Private post and telegraphic system	.889	.1176	.889	.1046	.8954	.862	8.5034
15	Private electric power generation	.729	.316	.731	.230	.7695	.742	3.1645
16	Private Engg. colleges for researches	.796	.3298	.796	.2626	.7374	.712	3.0321
17	Private research centers	.896	.1098	.896	.0984	.9016	.836	9.01746

The Fuzzy cordiality of Innovative Index may also be found as follows:

$$|A| = I \, d \, x = 12.198; \text{ and } \|A\| = \frac{1}{n} \int I \, dx = 0.8712 = \|A\|_i = i \quad (3)$$

The Fuzzy cardinality of creativity is 0.85 and that of innovity 0.8712. The Fuzziness of creativity and Innovity may be

$$E \frac{\|Ac\|}{\|AI\|} = \frac{0.85}{0.8712} = 0.574 \quad (4)$$

FUZZY LOGIC TRANSFORMATION CREATIVITIY AND INNOVATION FOR ENTERPRENURIAL DEVELOPMENT

The creativity and innovation or innovity have no reference and origin to compare the Fuzzy points and therefore the systems are highly Fuzzy and the Fuzziness

may be found. The creativity [c] and Innovation [I] have union and intersection. The two logics have greater mutual coupling and appear be decoupled one may find the intersection and union of c and I as follows:

$$\begin{aligned} C * I &= \mu * = \mu \min [CI] \text{ set} \\ C * I &= \mu * I = \mu \max [CI] \text{ set} \\ C \cap I &= \frac{\text{Cardinality of min}(CI) \text{ set}}{\text{Cardinality min}(CI) \text{ set}} \end{aligned} \quad (5)$$

From the table 2 and table 3 one can find Fuzziness as follows:

$$\begin{aligned} C \cap I &= \min [CI] \text{ set} = (.886, .776, .668, .826, .886, .726, .776, .786, .927, .662, .889, .627, .779, .666) \\ CI &= C \cup I = \max [CI] \text{ set} = (.927, .896, .962, .926, .926, .896, .892, .962, .823, .927, .662, .832, .889) \end{aligned} \quad (7)$$

The Fuzzy cardinality of the intersection would be 10.88 and relative cardinality 0.7771428. the Fuzzy cardinality of union would be 11.554 and Relative Fuzzy cardinality 0.8252857. The Fuzziness in coupling activities of creativity and Innovivity will be

$$E = 0.9416652 \quad (8)$$

ANALYSIS OF ORGANIZATION MANAGEMENT AND ADMINISTRATION OF THE CREATIVE AND INNOVATIVE PRIVATE ENGG. AND TECHNOLOGY COLLEGES OF CHHATISGARH STATE

For the analysis of the organization management and the innovative administration one can find the a, b and c constants or weights on the systems.

$f[a] \Rightarrow$ [Incentrative, tension, Fear, salary cut, Selection, Promises, State of non-decision, deboire, termination, no job, no salary fund collection. expenditure ; (X1 X 13)

$f[b] \Rightarrow$ (constraints, objectives, principals, professors, lecturers, qualifications, strikes, not will to work, demands, reluctance, friction, agitation, conflicts) (X1..... X 13)

$f[c] \Rightarrow$ (compliance, consent, submission, yielding, flexibility union, hobbies, Psychologies, synchronizations, intersections, interactions, inductions, Mutual coupling); (X1 X 13)

One can form a fuzzy set of the fuzzy variables a, b and c as follows:

$$f(a) \Rightarrow (0.826, .726, .892, .526, .0779, 0.826, 0.726, .126, .112, .116, 0.117, 0.886, 0.927) = a - (x) \quad (10)$$

$$f(b) \Rightarrow (0.779, 0.926, 0.662, .512, 0.886, 0.526, 0.112, 826, 0.769, .796, 0.662, 0.429, 0.169) = b - (x) \quad (11)$$

$$f(c) \Rightarrow (0.829, 0.776, 0.556, 0.726, 0.772, 0.112, 0.926, 0.779, 0.626, 0.112, 0.526, 0.827, 0.526) = c - (x) \quad (12)$$

One may find the Fuzzy cardinality of the Fuzzy functions $f(a)$, $f(b)$, and $f(c)$ as follows:

$$\begin{aligned} f(a) &= {}^n - adx = 7.585; \text{ and } f(a) = 1/n \\ {}^n ax &= .58346 \\ f(b) &= {}^n - bx = 8.063, \text{ and } f(b) = 1/n \\ {}^n bx &= .6202 \\ f(c) &= {}^n - cx = 8.093; \text{ and } f(c) = 1/n \\ cx &= .6225 \end{aligned} \quad (13)$$

Fuzzy cardinality is the defuzzification to measure the distance from the origin.

FAILURES OF THE MANAGEMENT

The Economic progress depends on the wills, wishes, demand and utility for a thing. The management has four steps, planning forecasting, scheduling and controlling. All four are managers. Presently all four steps have no synchronization of organs in Govt. functions but in private enterprises they have co-ordination and synchronization of activities. The old type of management have three steps; line staff and function. The organizer, manager and administrator are the personals to be defined, one more authority coordinator may help the three to synchronies the system of business.

Table – 3

Personnels	μ	λ	λR	Sec.	MTBF
Boss.	.778	.2510	.1953	.8047	3.984
Administrator	.796	.2281	.1816	.81184	4.384
Manager	.886	.12103	.10723	.8927	.8.262
Organizer	.0.926	.0768	.07119	.9288	13.0208
Line man	.826	.191158	.1578	.84210	5.2312
Staff man	.0.772	.2587	.19976	.80023	3.8654
Functional man	0.926	.0768	.07119	.9288	13.0208
Strategic planner	0.962	0.387	.0372	.627	25.84
Decision level	0.923	.08012	.0739	.926	12.4812
Executives	0.896	.10981	.0984	.9016	9.1066
Working level	0.986				
Chairman	.886	.12103	.10723		
Director	0.792	.2332	.18468		
Principal	0.779	.249	.1845		
Professor	0.926	.0768	.07119		
Teachers	0.896	.10981	.0984		

DISCUSSION

A systematic study of creativity and innovity is made in the Fuzzy space to find a clear cut idea. The creativity and innovity are the Fuzzy terms and can be represented by the probability indices of the development. The management administrative and organization must follow the D Alembert's principle. All the activities of the organization must equal to the applied force or the given sources of investment. The law of diminishing return is used for every thing as a system. The system elements must have a synchronism and co-ordination to reduce the failure rate. The failure rate of a system can be found using Natural outage rate (NOR), forced outage Rate [For] and the pollution outage rate. Pollution stands for the mixtures interactions, interferences, disturbances and unbalances.

Such problems can be solved using the Fuzzy Logic set theory by assigning the Fuzzy grades of truth to the narrative modelling of a system. The Entrepreneurial Development can be made through system theory. The society is always reluctant to use the new concepts and new systems, therefore creativity and innovity is the subject of discussion. New creativity and new innovity must have reference phasor or the origin to compare the movements and to measure progressive indices.

A study of CBIS, MIS, DSS, DB, OA, AI and IT is made in the space of creativity and innovity. These techniques provide comforts and society will recognize them in new future for their comforts.

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